

List of All Chemicals

P Croton lechleri (Euphorbiaceae)

Common name(s)

Dragons Blood; Sangre de Grado; Sangre de Dragon; Sangre de Drago

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Plant Part	Low PPM	High PPM	StdDev	*Reference
(+)-CATECHIN	Plant	--	--	--	*
Activities (30)					
ACE-Inhibitor IC50=0.155 mM/l					
ACE-Inhibitor 0.24 mg/ml rbt (weak activity)					
AntiHIV EC50=4 ug/ml					
Antiaggregant IC68=200 ug/ml					
Anticoagulant					
Anticomplementary 1/2 aspirin					
Antiinflammatory IC50=40-943 uM (cf indomethacin IC50=1 uM)					
Antimutagenic ID50=50-100 nM					Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507.ACS, Washington 402 pp.
Antioxidant					
Antiperoxidant					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiprostaglandin IC50=40-943 uM (cf indomethacin IC50=1 uM)					
Antiradicular					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiulcer					
Beta-Adrenergic Receptor Blocker 10 uM (weak activity)					Zhu, M., Phillipson, J. D., Greengrass, P. M., Bowery, N. E., Cai, Y. 1997. Plant Polyphenols: Biologically Active Compounds or Non-Selective Binders to Protein? Phytochemistry, 44(3): 441-447.
COX-1-Inhibitor IC50=183-279 uM (cf indomethacin IC50=1 uM)					
COX-2-Inhibitor IC50=546-5,910 uM (cf indomethacin IC50=1 uM)					
Cancer-Preventive					Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Cardiotonic					
Cyclooxygenase-Inhibitor					
Cytotoxic TC50=>100 ug/ml					
Dermatitogenic					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Hemostat					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Hepatoprotective					Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Immunostimulant					Economic & Medicinal Plant Research, 1: 124.
NO-Inhibitor IC11=250 uM					
Neuroprotective 1-10 uM					
Phagocytotic					Economic & Medicinal Plant Research, 1: 124.
Vasoconstrictor					Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Xanthine-Oxidase-Inhibitor					Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh.
cAMP-Phosphodiesterase-Inhibitor					

(+)-GALLOCATECHIN	Plant	--	--	--	*
Activities (7)					
ACE-Inhibitor					
Antimutagenic					
Antinociceptive					
Antioxidant					
Antithyroidic	Wealth of India.				
Bactericide MIC 250 ug/ml	Wealth of India.				
Beta-Adrenergic Receptor	Zhu. M.. Phillipson. I. D.. Greengrass. P. M.. Bowery. N. E.. Cai. Y. 1997. Plant Polyphenols: Biologically Active Compounds or Non-Selective				

(-)-EPICATECHIN

Plant -- -- *

Activities (38)

5-Lipoxygenase-Inhibitor IC ₅₀ =22-50 uM/l	
ACE-Inhibitor IC ₅₀ =0.216 mM/l	
ACE-Inhibitor 0.5 mg/ml rbt (weak activity)	
Allelochemical	Hanke, F. J., Natural Products as a Resource for Biologically Active Compounds, Thesis, U. Cal (Santa Cruz), 1986, 252 pp
AntiEBV	Economic & Medicinal Plant Research, 6: 189.
AntiHIV EC ₅₀ =2 ug/ml	
Antiaggregant	
Antianaphylactic	
Antibacterial	
Antidiabetic 30 mg/kg rat	
Antihepatitic	Vlietinck, A.J. and Domisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Antihyperglycemic	
Antiinflammatory	
Antileukemic	Economic & Medicinal Plant Research, 6: 189.
Antileukotriene	
Antilipoperoxidant	
Antimutagenic	
Antioxidant IC ₅₀ =6.3 ug/ml	
Antiperoxidant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiviral EC ₅₀ =2 ug/ml	
Beta-Adrenergic Receptor Blocker 10 uM	Zhu, M., Phillipson, J. D., Greengrass, P. M., Bowery, N. E., Cai, Y. 1997. Plant Polyphenols: Biologically Active Compounds or Non-Selective Binders to Protein? Phytochemistry, 44(3): 441-447.
COMP-Inhibitor	Dullo, A. G., et al. 1999. Efficacy of a green tea extract rich in catechin polyphenols and caffeine in increasing 24-h energy expenditure and fat oxidation in humans. Am. J. Clinical Nutrition, 70: 1040-1045.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Cardiotonic	
Choline-Sparing	
Cytotoxic TC ₅₀ =>100 ug/ml	
Hypocholesterolemic	
Hypoglycemic	
Immunostimulant	
Insulinogenic	Economic & Medicinal Plant Research, 6: 170.
Lipoxygenase-1-Inhibitor IC ₅₀ =60 mM	
Lipoxygenase-Inhibitor IC ₅₀ =140 uM	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507. ACS, Washington 402 pp.
Lipoxygenase-Inhibitor IC ₉₇ =5 mM	Oszmianski, J. and Lee, C.Y. 1990. Inhibitory Effect of Phenolics on Carotene Bleaching in Vegetables. J. Agric. Food Chem. 38: 688-690.
Pancreatogenic	
Pesticide	
Reverse-Transcriptase-Inhibitor 10 ng/ml	McKenna, D. J., Hughes, K., and Jones, K. 2000. Green Tea Monograph. Alternative Therapies, 6(3): 61-82.
Vasodilator uM	McKenna, D. J., Hughes, K., and Jones, K. 2000. Green Tea Monograph. Alternative Therapies, 6(3): 61-82.
Xanthine-Oxidase-Inhibitor IC ₅₀ =>40	Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. Chem. Pharm. Bull. 38(5): 1224-1229

(-)-EGIGALLOCATECHIN

Plant -- -- *

Activities (21)

ACE-Inhibitor	
Aldose-Reductase-Inhibitor	
Antiacne	
Antiamoebic	Meckes, M., Calzada, F., Tapia-Contreras, A., Cedillo-Rivera, R. 1999. Antiprotozoal Properties of <i>Helianthemum glomeratum</i> . Phytotherapy Research, 13(2): 102-105.
Antibacterial	
Anticarcinogenic	
Anticaries	
Antigiardial	Meckes, M., Calzada, F., Tapia-Contreras, A., Cedillo-Rivera, R. 1999. Antiprotozoal Properties of <i>Helianthemum glomeratum</i> . Phytotherapy Research, 13(2): 102-105.
Antimutagenic	
Antioxidant IC ₅₀ =1.4 ug/ml	

uM	
Antiradicular	
Antistreptococcic	
Beta-Adrenergic Receptor Blocker 10 uM	Zhu, M., Phillipson, J. D., Greengrass, P. M., Bowery, N. E., Cai, Y. 1997. Plant Polyphenols: Biologically Active Compounds or Non-Selective Binders to Protein? <i>Phytochemistry</i> , 44(3): 441-447.
COMP-Inhibitor	Dullo, A. G., et al. 1999. Efficacy of a green tea extract rich in catechin polyphenols and caffeine in increasing 24-h energy expenditure and fat oxidation in humans. <i>Am. J. Clinical Nutrition</i> , 70: 1040-1045.
Lipoxygenase-Inhibitor IC50=21 uM	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507. ACS, Washington 402 pp.
Neuroprotective 400 uM	
Peroxynitrite-Scavenger IC50=0.228 ug/ml	
Pesticide	
Protisticide	Meckes, M., Calzada, F., Tapia-Contreras, A., Cedillo-Rivera, R. 1999. Antiprotozoal Properties of <i>Helianthemum glomeratum</i> . <i>Phytotherapy Research</i> , 13(2): 102-105.
Xanthine-Oxidase-Inhibitor IC50=>40	Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. <i>Chem. Pharm. Bull.</i> 38(5): 1224-1229

1,3,5-TRIMETHOXYBENZENE	Latex Exudate	--	--	*
Activities (1)				
Antibacterial				
2,4,6-TRIMETHOXYPHENOL	Latex Exudate	--	--	*
Activities (1)				
Antibacterial				
3',4-O-DIMETHYLCEDRUSIN	Latex Exudate	--	--	*
3,4-DIMETHOXYBENZENYL-ALCOHOL	Latex Exudate	--	--	*
3,4-DIMETHOXYPHENOL	Plant	--	--	*
4-HYDROXYPHENETHYL-ALCOHOL	Latex Exudate	--	--	*
4-HYDROXYPHENETHYL-ALCOHOL-ACETATE	Latex Exudate	--	--	*
4-O-DIMETHYLCEDRUSIN	Latex Exudate	--	--	*
Activities (1)				
Epitheliogenic				
ALKALOIDS	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
ALPHA-CALACORENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
ALPHA-COPAENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
ALPHA-PINENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (28)				
Allelochemic				
Allergenic				
Antiacne				
Antibacterial				
Antifeedant				
Antiflu	Economic & Medicinal Plant Research, 5: 195.			
Antiinflammatory 500 mg/kg				
Antipneumonic				
Antiseptic				
Antispasmodic				
Antistaphylococcic				
Antiviral	Economic & Medicinal Plant Research, 5: 195.			

Coleoptophile	
Expectorant	Michael Castleman 1991. <i>The Healing Herbs</i> . Rodale Press, Emmaus, PA 436 pp.
FLavor FEMA 15-150	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Herbicide IC50=30 uM	Keeler, R.F. and Tu, A.T. eds. 1991. <i>Toxicology of Plant and Fungal Compounds</i> . (<i>Handbook of Natural Toxins Vol. 6</i>) Marcel Dekker, Inc. NY. 665 pp.
Insecticide 0.82 uM/fly	
Insectifuge 50 ppm	
Insectiphile	J. Stored. Prod. Res., 22:141, 1986.
Irritant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
P450-2B1-Inhibitor IC50=0.087 uM	
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	
Sedative	Lawrence Review of Natural Products, Jun-90.
Spasmogenic	
Tranquilizer	Lawrence Review of Natural Products, Jun-90.
Transdermal	

ALPHA-THUJENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
BETA-CARYOPHYLLENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
BETA-ELEMENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.

Activities (5)

Anticancer (Cervix)	Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987.
Antigliomic	
Antiproliferant	
Antitumor (Cervix)	Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987.
Apoptotic	

BETA-PINENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (13)

Allergenic	
Antiinflammatory	
Antiseptic	Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
Antispasmodic	
Candidicide	
FLavor FEMA 15-600	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Herbicide	Keeler, R.F. and Tu, A.T. eds. 1991. <i>Toxicology of Plant and Fungal Compounds</i> . (<i>Handbook of Natural Toxins Vol. 6</i>) Marcel Dekker, Inc. NY. 665 pp.
Insectifuge	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. <i>Compendium of Safety Data Sheets for Research and Industrial Chemicals</i> . VCH Publishers, New York. 3560-4253.
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	
Spasmogenic	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp.
Transdermal	

BETA-SITOSTENONE	Latex Exudate	--	--	*
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BETA-SITOSTEROL	Plant	--	--	*
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Activities (47)

Androgenic	
Angiogenic	
Anorexic	Martindale's 28th
Antiadrenomic	Merck 11th Edition
Antiandrogenic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antibacterial	Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 155.
Anticancer (Breast)	Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from Vaccinium myrtillus (Bilberry) Fruits and Cell Cultures. <i>Plant Sci.</i> , 131(1): 95-103.
Anticancer (Cervix)	
Anticancer (Lung)	
Antiedemic IC54=320 mg/kg orl	

Antifeedant	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Antifertility	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antigonadotrophic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antihyperlipoproteinaemic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Antiinflammatory	
Antileukemic	
Antilymphomeric	
Antimutagenic 250 ug/ml	
Antiophidic 2.3 mg mus	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC44=10 uM	
Antiprogestational	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Antiprostaglandin 30 mg/day/12 wks	
Antiprostatadenomic	Merck 11th Edition
Antiprostatic 10-20 mg 3 x/day/orl man	
Antipyretic	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs</i> . Chapman & Hall, New York. 941 pp.
Antitumor (Breast)	Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from <i>Vaccinium myrtillus</i> (Bilberry) Fruits and Cell Cultures. <i>Plant Sci.</i> , 131(1): 95-103.
Antitumor (Cervix)	
Antitumor (Lung)	
Antiviral	Abid Ali Khan, M.M., Jain, D.C., Bhakuni, R.S., Zaim, M., and Thakur, R.S. 1991. Occurrence of some antiviral sterols in <i>Artemisia annua</i> . <i>Plant Science</i> , 75: 161-165, 1991.
Apoptotic	
Artemicide LC50=110 ppm	Jung, J.H., Pummangura, S., Chaichantipyuth, C., Patarapanich, C., and McLaughlin, J.L. 1989. Bioactive Constituents of <i>Melodorum fruticosum</i> . <i>Phytochemistry</i> . 29(5): 1667-1670. 1990.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidicide	Recently became <i>Internat. J. Crude Drug Res.</i> 28(1,2,3,4):1990, page 155.
Caspase-8-Inducer	
Estrogenic	
Febrifuge	Neuwinger, H. D. 1996. <i>African Ethnobotany - Poisons and Drugs</i> . Chapman & Hall, New York. 941 pp.
Gonadotrophic	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Hepatoprotective	
Hypocholesterolemic 2-6 g/man/day/orl	Martindale's 30th
Hypocholesterolemic 9-3,330 mg/man/day/orl	Martindale's 28th
Hypoglycemic	Ivorra, M.D., Paya, M., and Villar, A. 1989. A Review of Natural Products and Plants as Potential Antidiabetic Drugs. <i>Journal of Ethnopharmacology</i> , 27: 243-275, 1989.
Hypolipidemic 2-6 g/day	
Pesticide	
Spermicide	Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. <i>Journal of Ethnopharmacology</i> , 28: 221-234, 1990.
Ubiquiot	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Ulcerogenic 500 mg/kg ipr rat	

BETA-SITOSTEROL-3-O-BETA-D-GLUCOPYRANOSIDE

Plant -- -- *

Activities (3)

- Antiinflammatory
- Antiretroviral
- Antiviral

BETAINE

Plant -- -- Taylor, Leslie. 2005. *The Healing Power of Rainforest Herbs*. SquareOne Publisher, Garden City Park, NY. 519 pp.

Activities (14)

- Abortifacient
- Antigastritic Martindale's 29th
- Antihomocystinuric
- Antimyoatrophic
- Bruchiphobe Jacobson, M., *Glossary of Plant-Derived Insect Deterrents*, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
- Cardioprotective
- Diuretic Wealth of India.
- Emmenagogue Wealth of India.
- Ethanolytic
- Expectorant
- Hepatoprotective
- Lipotropic
- Mucogenic

BINCATRIOL	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
BORNEOL	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (35)				
(-)Chronotropic 29 ug/ml	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.			
(-)Inotropic 29 ug/ml	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.			
Allelochemic				
Analgesic				
Antiacetylcholine	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.			
Antibacterial MIC=125-250 ug/ml				
Antibronchitic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antiescherichic MIC=125 ug/ml				
Antifeedant				
Antiinflammatory				
Antitotic				
Antipyretic				
Antisalmonella				
MIC=125 ug/ml				
Antispasmodic				
ED50=0.008 mg/ml				
Antistaphylococccic MIC=250 ug/ml				
Antiyeast MIC=250 ug/ml				
CNS-Stimulant	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.			
CNS-Toxic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Candidicide MIC=250 ug/ml				
Choleretic				
FLavor FEMA<1	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Fungicide				
Hepatoprotective				
Herbicide IC50=470 mM	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.			
Herbicide IC50=470 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.			
Inhalant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Insect-Repellent				
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Irritant	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.			
Myorelaxant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.			
Nematicide MLC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.			
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Pesticide				
Sedative	Medline (post 1990 searches filed in my computer)			
Tranquilizer				
CALAMENENE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
CAMPHENENE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (9)				
Allelopathic	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.			
Antilithic?	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Antioxidant	Jim Duke's personal files.			
Expectorant	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.			
FLavor FEMA 15-175	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Hypocholesterolemic?	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			

Pesticide				
Spasmogenic	Fitoterapia No.59-1984.			
CATECHIN-(4-ALPHA-8)-EPICATECHIN	Plant	--	--	*
CATECHIN-(4-ALPHA-8)-EPIGALLOCATECHIN	Plant	--	--	*
CATECHIN-(4-ALPHA-8)-GALLOCATECHIN-(4-ALPHA-8)-EPIGALLOCATECHIN	Plant	--	--	*
CATECHINS	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs.</i> SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (1)				
Tyrosine-Kinase-Inhibitor				
CROLECHINIC-ACID	Latex Exudate	--	--	*
CROLECHINOL	Latex Exudate	--	--	*
CUPAROPHENOL	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs.</i> SquareOne Publisher, Garden City Park, NY. 519 pp.
D-LIMONENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs.</i> SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (19)				
Antiacetylcholinesterase IC22=1.2 mM				
Anticancer (Breast) 8,000 mg/kg				
Anticancer (Gastric)				
Antimelanomic IC50=450 uM/l				
Antitumor (Breast) 8,000 mg/kg				
Antitumor (Gastric)				
Antitumor-Promoter				
Apoptotic 8,000 mg/kg				
Cancer-Preventive				
Chemopreventive				
Differentiator 8,000 mg/kg				
FLavor FEMA 30-2,300				
Hypocholesterolemic				
Insecticide				
Insectifuge				
Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.				
Litholytic				
Martindale's 28th				
Nephrotoxic				
P450-2B1-Inhibitor IC50=0.19 uM				
Pesticide				
DAUCOSTEROL	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs.</i> SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (5)				
Aldose-Reductase-Inhibitor 0.1 mM/l rat (weak activity, 31.9% inhibition)	Fujita, T., Ohira, K., Miyatake, K., Nakano, Y., Nakayama, M. 1995. Inhibitory Effect of Perillosides A and C, Related Monoterpene Glucosides on Aldose Reductase and Their Structure-Activity Relationships. <i>Chem Pharm Bull</i> , 43(6): 920-926.			
Antileukemic				
Antispasmodic 20 mg/kg	=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp			
Antitumor				
Hypoglycemic	Economic & Medicinal Plant Research, 6: 158.			
DIHYDROBENZOFURAN	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs.</i> SquareOne Publisher, Garden City Park, NY. 519 pp.
DIPENTENE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs.</i> SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (7)				
Allergenic				
Antibacterial	Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.			
Antiviral	Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.			
Expectorant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			
Irritant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.			

DITERPENES	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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EPIGALLOCATECHIN	Latex Exudate	--	--	*
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Activities (6)

Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antioxidant IC50=1.4 ug/ml	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. <i>Chem. Pharm. Bull.</i> 38(4): 1049-1052, 1990.
Antiradicular	
Beta-Adrenergic Receptor Blocker 10 uM	Zhu, M., Phillipson, J. D., Greengrass, P. M., Bowery, N. E., Cai, Y. 1997. Plant Polyphenols: Biologically Active Compounds or Non-Selective Binders to Protein? <i>Phytochemistry</i> , 44(3): 441-447.
Lipoxygenase-Inhibitor IC50=21 uM	Phenolic Compounds in Food and Their Effects on Health. Antioxidants & Cancer Prevention. Huang, M.T., Ho, C.T. and Lee, C.Y. eds. 1992. ACS Symposium Series 507. ACS, Washington 402 pp.
Xanthine-Oxidase-Inhibitor IC50=>40	Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. <i>Chem. Pharm. Bull.</i> 38(5): 1224-1229

EUGENOL	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (76)

Acaricide LD50=5.47 ug/sq cm cf DEET at 37.59 ug/sq cm	
Allergenic	
Analgesic	Merck 11th Edition
Anesthetic 200-400	Phytotherapy Research, 4: 93.
AntiTNF	
Antiaggregant IC50=0.3 uM	Phytotherapy Research, 4: 93.
Antiarrachidonate	
Antibacterial 500 ppm	Valnet, J. 1982. <i>The Practice of Aromatherapy</i> . Translated from the 1980 French Edition by Robin Campbell and Libby Houston. Destiny Books, New York. 279 pp.
Antibacterial MBC=400 ug/ml	
Anticonvulsant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Antiedemic 100	Phytotherapy Research, 4: 95.
Antiestrogenic	
Antifeedant	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Antigenotoxic 50-500 mg/kg orl mus	
Antiherpetic IC50=16.2-25.6 ug/ml	
Antiinflammatory (11 uM) IC~97=1,000 uM	
Antikeratotic IC50=16.2-25.6 ug/ml	
Antimitotic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antinitrosating	
Antioxidant IC65=30 ppm	
Antioxidant 10 uM	
Antiprostaglandin 11 uM	
Antiprostaglandin IC50=9.2 mM	
Antipyretic 3 ml/man/day	
Antiradicular EC50=2 u/l	
Antisalmonella MIC=400 ug/ml	
Antiseptic 3 ml/man/day	
Antiseptic 400 ug/ml	
Antispasmodic	Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp.
Antistaphylococcic	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles <i>Artemisia</i> .344pp.Maffei,M.(Ed)2002. <i>Vetiveria</i> .The Genus <i>Vetiveria</i> .Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999. <i>Tea Tree</i> .The Genus <i>Melaleuca</i> .Harwood Acad.Pub.Amsterdam,Netherlands.
Antithromboxane	Lawrence Review of Natural Products, Jul-87.
Antitumor	Zheng, G-Q., Kenney, P.M., and Lam, L.K.T. Sesquiterpenes From Clove (<i>Eugenia caryophyllata</i>) As Potential Anticarcinogenic Agents. <i>Journal of Natural Products</i> 55(7): 999-1003, 1992.
Antiulcer	
Antiviral IC50=16.2-25.6 ug/ml	
Apifuge	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
CNS-Depressant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.

uM

COX-2-Inhibitor IC>97=1,000 uM

COX-2-Inhibitor IC50=129 uM

Calcium-Antagonist
IC50=224 uMCalcium-Antagonist
IC50=200 uM gpg

Cancer-Preventive

Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Phytotherapy Research, 4: 93.

Candidicide

Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.

Carcinogenic?

Yamamoto, A., Umemori, S., and Muranishi, S. 1993. Absorption Enhancement of Intrapulmonary Administered Insulin by Various Absorption

Enhancers and Protease Inhibitors in Rats. *J. Pharm. Pharmacol.* 46: 14-18, 1994.

Carminative

Choleretic

Pizzorno, J. 1998. Total Wellness. Prima Health, a division of Prima.

Cytochrome-P450-Inhibitor

Phytotherapy Research, 4: 93.

Cytotoxic 25 ug/ml

J. Aromatherapy 4: 22.

Dermatitigenic

Enterorelaxant

Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

FFlavor FEMA 10-500

Fungicide

Hepatoprotective 100 ppm

Herbicide

Insecticide

Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

Insectifuge

Irritant

Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

Juvabional

Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC

Nematicide MLC=2,000 ug/ml

Shoyakugaku Zasshi, 44: 183.

Neurotoxic

R.J. Hixtable (Huxtable, R.J. (as T. Max). 1992. This and That:The Essential Pharmacology of Herbs and Spices. Tips 13:15-20 Huxtable, R.J. 1992b. The Myth of Benficit Nature. The Risk of Herbal Preparations. *Anns. Intern. Med.* 117(2):165-6; Huxtable, R.

Perfumery

Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Pesticide

Prostaglandin-Synthesis-Inhibitor 1 mM rbt

Chen, S. J., Wang, M. H., Chen, I. J. 1996. Antiplatelet and Calcium Inhibitory Properties of Eugenol and Sodium Eugenol Acetate. *Gen Pharmacol*, 27(4): 629-633.

Prostaglandin-Synthesis-Inhibitor IC50=9.2 uM

Sedative

Termiticide LD100=5 mg/g

Trichomonicide LD100=300 ug/ml

Trichomonistat IC50=10 ug/ml

Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.

Trypsin-Enhancer

Lawrence Review of Natural Products, Dec-93.

Ulcerogenic

Phytotherapy Research, 4: 93.

Varroacide

Vasodilator

Vermifuge

EUPAROPHENOL	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
FLAVAN-3-OLS	Latex Exudate	--	--	*
GALLOCATECHIN	Latex Exudate	--	--	*
GALLOCATECHIN-(4-ALPHA-8)-EPICATECHIN	Plant	--	--	*
GALLOCATECHIN-(4-ALPHA-8)- EGIGALLOCATECHIN	Plant	--	--	*
GAMMA-TERPINENE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.

Activities (11)ACE-Inhibitor 100 ug/ml
(weak activity)

Acaricide

Aldose-Reductase-Inhibitor 100 ug/ml

Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpene from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.

Antiacyetylcholinesterase
IC23=1.2 mM

Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.

Flavor FEMA 1-40	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Insectifuge	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. <i>Compendium of Safety Data Sheets for Research and Industrial Chemicals</i> . VCH Publishers, New York. 3560-4253.
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	

GAMMA-TERPINEOL	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
GLAUCINE	Leaf	--	--	*

Activities (10)

Adrenalytic	
Antinociceptive	
Antispasmodic	
Antisuperoxidogenic IC50=49 nM	
Antitussive	Martindale's 29th
Beta-Adrenergic Receptor Blocker 0.1 uM	de las Heras, B., Rios, J.L., Martinez-Mir, I., Rubio, E. 1990. A Study of the Adrenergic Activity of the Alkaloids Boldine and Glaucine. <i>Pharmazie</i> , 45(6): 443-444.
Hypoglycemic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Hypotensive	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.
Pyrogenic 10 mg/kg igs rat	Pinto, L., Borrelli, F., Bombardelli, E., Cristoni, A., Capasso, F. 1998. Anti-Inflammatory, Analgesic and Antipyretic Effects of Glaucine in Rats and Mice. <i>Pharm Pharmacol Commun</i> , 4(10): 502-505.
Respiradepressant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp.

HARDWICKIC-ACID	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (4)

Antibacterial	
Antiseptic	
Fungicide	
Pesticide	

ISOBOLDINE	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (5)

Antifeedant	Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Antiobesity	
Dopamine-Adenylate-Cyclase-Inhibitor	Grenand, P., Moretti, C., and Jacquemin, H. 1987. <i>Pharmacopees Traditionnelles en Guyane</i> . l'ORSTROM, Paris. 569 pp.
Fungicide	
Pesticide	

KORBERIN-A	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (2)

Antibacterial	
Pesticide	

KORBERIN-B	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (2)

Antibacterial	
Pesticide	

LIGNANS	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (10)

Allergenic	
Antiesticogenic	
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antimycotic	

Antitumor				
Antiviral				
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.			
Cardiovascular				
Cathartic				
LIGNIN	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (13)				
AntiHIV				
Antibacterial				
Anticancer				
Anticorony				
Antidiarrheic				Martindale's 29th
Antinitrosaminic				
Antioxidant				
Antitumor				
Antiviral				
Chelator				
Hypocholesterolemic				
Laxative				
Pesticide				
LINALOL	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
MAGNOFLORINE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (11)				
Antibacterial				
Antineuromuscular ED50=10 mg/kg				
Antispasmodic				Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
CNS-Depressant				Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
Curaroid <1% tubocurarine				Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Hypotensive				
PAF-Inhibitor				
Paralytic				Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Pesticide				
Toxic				Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Vasodilator				Huang, K. C. 1993. The Pharmacology of Chinese Herbs. CRC Press, Boca Raton, FL 388 pp.
METHYL-THYMOL	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
MYRCENE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
Activities (22)				
ACE-Inhibitor 100 ug/ml				
Aldose-Reductase-Inhibitor 100 ug/ml	Okamura, K., Iwakami, S., Matsunaga, T. 1992. Biological Activity of Monoterpenes from Trees. Toyama-Ken Yakuji Kenkyusho Nenpo, (20): 95-101.			
Allergenic				
Analgesic	Kauderer, B., Zamith, H., Paumgartten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.			
Antibacterial				
Anticonvulsant				
Antimutagenic	Kauderer, B., Zamith, H., Paumgartten, F.J.R., and Speit, G. Evaluation of the Mutagenicity of B-Myrcene in Mammalian Cells In Vitro. Environmental and Molecular Mutagenesis 18: 28-34, 1991.			
Antinitrosaminic				
Antinociceptive 10-20 mg/kg ipr mus	Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.			
Antinociceptive 20-40 mg/kg scu mus	Rao, V.S.N., Menezes, A.M.S., Viana, G.S.B. 1990. Effect of myrcene on nociception in mice. J. Pharm. Pharmacol. 42: 877-878, 1990.			
Antioxidant	Jim Duke's personal files.			
Antispasmodic	Jim Duke's personal files.			
Chemopreventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.			
FLavor FEMA 0.5-9	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Fungicide	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.			
Hypothermic				

Irritant	Zeebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Myorelaxant 100-200 mg/kg	
P450-2B1-Inhibitor IC50=0.14 uM	
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pesticide	

NORISOBOLDINE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
P-CYMENE	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.

Activities (16)

Analgesic	Martindale's 28th			
Antiacyetylcholinesterase IC40=1.2 mM				
Antibacillary				
Antibacterial				
Antiflu				
Antirheumatalgic	Martindale's 28th			
Antiviral				
FLavor FEMA 12-250	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Fungicide	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.			
Herbicide IC50=50 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.			
Insectifuge	Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.			
Irritant	Zeebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.			
Laxative	Zeebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.			
Pesticide				
Sedative	Zeebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.			
Trichomonicide LD100=50 ug/ml				

PHENOLS	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
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PROANTHOCYANIDINS	Latex	--	900000.0	*
	Exudate			

Activities (34)

AntiCVI 100 mg/day/man				
Antialopetic				
Antiatherosclerotic				
Antibacterial				
Antidiabetic	Soumyanath, A. Ed. 2006. Traditional Medicines for Modern Times - Antidiabetic Plants. CRC Press, Taylor & Francis Group. Boca Raton, FL. 314 pp.			
Antiedemic 400 mg/kg/day orl rat				
Antihistaminic				
Antiischemic				
Antioxidant >Vit E-succinate				
Antioxidant 5 x Vit. E				
Antiperiodontal	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).			
Antiplaque	Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).			
Antiproliferant				
Antiretinopathic				
Antiseptic				
Antistroke 200 mg/kg orl rat				
Antitumor				
Antiviral				
Beta-Glucuronidase-Inhibitor IC50=1 uM				
Capillariprotective				
Cardioprotective				
Collagenase-Inhibitor				
Collagenic				
Deodorant	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.			
Elastase-Inhibitor IC50=~4 uM				

Gram(-)icide				
Hepatoprotective				
Hyaluronidase-Inhibitor IC50+=50-80 uM				
Hypoglycemic	Soumyanath, A. Ed. 2006. Traditional Medicines for Modern Times - Antidiabetic Plants. CRC Press, Taylor & Francis Group. Boca Raton, FL. 314 pp.			
Ornithine-Decarboxylase-Inhibitor				
Propeptic				
Vasodilator				
Vasorelaxant				

PROCYANIDIN	Latex Exudate	--	--	*
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Activities (11)

AntiHIV				
Antiallergic				
Antibacterial				
Antibiotic				
Antiedemic				
Antieoxidative				
Antiviral				
Capillariprotective				
Hyaluronidase-Inhibitor				
Pesticide				
Xanthine-Oxidase-Inhibitor IC50=>40	Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. <i>Chem. Pharm. Bull.</i> 38(5): 1224-1229			

PROCYANIDIN-B-1	Plant	--	--	*
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Activities (1)

ACE-Inhibitor 0.33 mg/ml (58.2% inhibition)

PROCYANIDIN-B-4	Plant	--	--	*
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Activities (4)

Antidermatitic				
Antigastrotic				
Beta-Adrenergic Receptor Blocker 10 uM	Zhu, M., Phillipson, J. D., Greengrass, P. M., Bowery, N. E., Cai, Y. 1997. Plant Polyphenols: Biologically Active Compounds or Non-Selective Binders to Protein? <i>Phytochemistry</i> , 44(3): 441-447.			
Vulnerary				

PRODELPHINIDIN	Latex Exudate	--	--	*
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Activities (1)

Antibiotic

RESIN	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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SINOACUTINE	Leaf	--	1.0	*
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Activities (1)

Antiinflammatory IC26=300 ppm orl

SITOSTEROL	Latex Exudate	--	--	*
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SITOSTEROL-BETA-GLUCOPYRANOSIDE	Latex Exudate	--	--	*
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TANNIN	Plant	--	--	Taylor, Leslie. 2005. <i>The Healing Power of Rainforest Herbs</i> . SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (35)

Anthelmintic				
AntiHIV				
Antibacterial				
Anticancer				
Anticariogenic				

Antidysenteric	
Antihepatotoxic	
Antihypertensive	
Antilipolytic	
Antimutagenic	
Antinephritic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. <i>Chem. Pharm. Bull.</i> 38(4): 1049-1052, 1990.
Antiophidic	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC50=1.44 ug/ml	
Antioxidant 1/3 quercetin	
Antiradicular 500 mg/kg/day orl mus	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. <i>Chem. Pharm. Bull.</i> 38(4): 1049-1052, 1990.
Antiradicular 1/3 quercetin	
Antirenitic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. <i>Chem. Pharm. Bull.</i> 38(4): 1049-1052, 1990.
Antitumor	
Antitumor-Promoter	
Antiulcer	
Antiviral	
Cancer-Preventive	HerbalGram No. 22 - Spring 1990, page 14.
Carcinogenic	
Chelator	
Cyclooxygenase- Inhibitor	
Glucosyl- Transferase-Inhibitor	
Hepatoprotective	
Immunosuppressant	
Lipoxygenase- Inhibitor	
MAO-Inhibitor	
Ornithine- Decarboxylase- Inhibitor	
Pesticide	
Psychotropic	Uchida, U., Ohta, H., Niwa, M., Mori, A., Nonaka, G-i., Nishioka, I., and Zaki, M. 1989. Prolongation of Life Span of Stroke-Prone Spontaneously Hypertensive Rats (SHRSP) Ingesting Persimmon Tannin. <i>Chem. Pharm. Bull.</i> 38(4): 1049-1052, 1990.
Xanthine-Oxidase- Inhibitor	

TASPINE	Latex	13000.0	204000.0	*
	Exudate			

Activities (12)

Antia apoptotic	
Antiedemic	
Antiinflammatory	
Antileukemic	
Antisarcomic	Vlietinck, A.J. and Dommisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Antiviral	Vlietinck, A.J. and Dommisse, R.A. eds. 1985. Advances in Medicinal Plant Research. Wiss. Verlag. Stuttgart.
Cicatrizant ED50=0.375 mg/kg	
Cicatrizant ED50=15 ug/g mus	
Cytotoxic 250 ng/ml	
Reverse-Transcriptase-Inhibitor	
Viristat IC50=172-242 nM/ml	
Vulnerary ED50=15 ug/g mus	

TERPINEN-4-OL	Plant	--	--	Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.
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Activities (23)

Allelopathic	Wright,C.W.(Ed)2002.Medicinal&Aromatic Plants-Industrial Profiles.Artemisia.344pp.Maffei,M.(Ed)2002.Vetiveria.The Genus Vetiveria.Taylor&Francis.NY,NY.191pp.Southwell,I.,Lowe,R.(Eds)1999.Tea Tree.The Genus Melaleuca.Harwood Acad.Pub.Amsterdam,Netherlands.
Antiacetylcholinesterase IC21-24=1.2 mM	
Antiacne	
Antiallergic	
Antiasthmatic	Chin. J. Tuber. Respir. Dis., 4:203, 1982.
Antibacterial	
Antioxidant	
Antiseptic	Flav. & Frag. J. 9: 129.

Antitussive	Chin. J. Tuber. Respir. Dis.
Antulcer	
Bacteriostatic	Chin. J. Tuber. Respir. Dis.
Diuretic 0.1 ml/rat	
Fungicide	
Herbicide IC50=200 mM	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.
Herbicide IC50=22 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Insectifuge	
Irritant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Nematicide MLC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.
Pesticide	
Renoirritant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Spermicide ED100=0.015	
Vulnerary	Lawrence Review of Natural Products, Jan-91.

THALIOPORPHINE

Leaf -- -- *

VANILLIN

Plant -- -- Taylor, Leslie. 2005. The Healing Power of Rainforest Herbs. SquareOne Publisher, Garden City Park, NY. 519 pp.

Activities (28)

Allelochemical IC50=4.26 mM	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.
Allergenic	
Antianemic	
Anticancer	
Antidrepanocytic	
Antiescherichic 10-100 mmol/l	
Antilactobacillic 10-100 mmol/l	
Antilisteria	
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antioxidant #NAME?	
Antipolio	Economic & Medicinal Plant Research, 5: 194.
Antiradicular 7 x quercetin	
Antisickling	
Antitumor	
Antitumor-Promoter	
Antiviral	Economic & Medicinal Plant Research, 5: 194.
Antiyeast 8-30 mM	
Bacteristat 10-40 mmol/l	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidicide 8-20 mM	
Choleretic	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.
FLavor FEMA 50-20,000	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Immunosuppressant	
Insectifuge?	Martindale's 28th
Irritant	
Perfumery	
Pesticide	